ABERDEEN AREA INDIAN HEALTH SERVICE FISCAL YEAR 1996 ANNUAL ENERGY REPORT

October 1996

INTRODUCTION

The annual energy report has been completed in accordance with the DHHS FY 1995 Energy Reporting Format, dated September 18, 1995. Attached are forms A-1 Energy Consumption and Cost Data and C-1 Energy Conservation Program Summary for submission in the DHHS FY 1996 Annual Report to Congress.

The total Area energy consumption in FY 1996 was 163,871 BTU per gross square foot per year. This total represents 1.1% reduction of energy consumption from the baseline in FY 1985. The total cost of energy in FY 1996 was \$1.27 per gross square foot.

A. Annual Energy Management Data Report

Form A-1 Energy Consumption and Cost Data of energy usage is attached. Total energy consumption for the Aberdeen Area in FY 1996 was 163,871 BTU per gross square foot at a cost of \$1.27 per gross square foot.

Form C-1 Energy Conservation Program Summary is attached. Total cost of energy consumed in FY 1996 was \$1,301,496 for the twenty six (26) facilities in the Aberdeen Area.

B. Energy Consumption Reduction Goals

The Aberdeen Area has the following goals for FY 1997:

- 1. Continue to assist Area Service Units in identifying low cost and no cost energy conservation measures.
- 2. Continue to plan energy saving projects according to recommendations from previously completed energy audits.
- 3. Plan to complete an energy audit at the Winnebago Hospital which has the highest energy consumption in the Aberdeen Area.

C. Energy Saving Performance Contracts:

The Aberdeen Area is considering performance contracting for a previously approved lighting retrofit project. Discussions have been held with the EPA Green Lights Program for lighting retrofit performance contracting. The Aberdeen Area is discussing performance contracting with the Department of Energy (DOE) - Federal Energy Management Program (FEMP) which could lead to future performance contracting and funding from DOE. The Aberdeen Area is hopeful these EPA and DOE programs will result in successful performance contracting ventures.

D. Energy Efficiency and Water Conservation Project Funding:

The Fort Yates Hospital will be undergoing a major HVAC renovation in FY 1997. New high efficiency equipment is estimated to save 5% from the total energy consumption at this hospital. The Rosebud Hospital will also undergo HVAC modifications which will reduce energy consumption by approximately 7%.

E. Energy and Water Surveys and Audits:

The Aberdeen Area has completed energy audits at eight (8) Area facilities. One additional audit will be completed in FY 1997 and the remaining six (6) audits will be planned for FY 1998.

F. Implementation of Energy Efficiency and Water Conservation Projects:

No information to report.

G. Solar and Other Renewable Energy:

No information to report.

H. Minimization of Petroleum - Based Fuel Use:

Area facilities with incinerators have planned to discontinue their use in accordance with EPA regulations. The Area estimates a 20,000 gallon diesel fuel reduction per year when all Area incinerators are removed from service.

I. Energy Efficient Operations and Maintenance Procedures.

The Area has an active Preventive Maintenance program which is an aid in reducing energy consumption. The projected savings from this program is estimated to be 2% of fuel consumption at Area facilities.

J. Energy Efficiency in New Spaces

The Aberdeen Area Youth Regional Treatment Center (Chief Gall) is one example of a new facility using state of the art systems such as T8 lamps with electronic ballasts for an energy efficient lighting system and a computer controlled energy management system for heating and cooling. This new facility is estimated to have an energy efficiency as high as 20% better than older similar facilities.

K. Performance Evaluation

The Area Facilities Engineer and the DFM Mechanical Engineer have energy management in their annual performance evaluations. It will be recommended in CY 1997 that each Facility Manager have this element in their performance evaluations.

L. Incentive Awards:

No information to report.

M. Procurement of Energy Efficient Products:

No information to report.

N. Energy Management Training.

Energy management training is provided to Facility Managers through monthly newsletters and Area workshops. Additional training is provided by manufacturers as Area HVAC systems are upgraded.

O. Environmental Benefits of Energy Management Activities:

Air pollution is reduced as Area facilities discontinue incinerator use.

ENERGY CONSUMPTION AND COST DATA

IHS AREA:	ABERDEEN	REPORTED YEAR:	1996
PREPARED BY:	Najam Ikramullah	TITLE:	Mechanical Engr.
PHONE NUMBER:	605/226-7461	DATA SUBMITTED:	10-22-96

Buildings/Facilities

Energy Type	Reporting Units	Annual Consumption	Annual Cost (thous.\$)	Unit Cost (\$)	Total Btu MM
Electricity	KWH	1.65 E+7	899	0.05 /kwh	56,517
Fuel Oil	Thous.Gal.	384.2	269	0.70 /gal	53,840
Natural Gas	Thous.Cu.Ft.	53630	64	1.2 /thous.cu.ft.	55,293
LPG/Propane	Thous.Gal.	115374	68	.59 /gal	11,018
Coal	S. Ton			/S.ton	
Purch.Steam	MMBtu			/MMBtu	
Other	MMBtu			/MMBtu	
TOTALS			1300		167,218

Gross Square Feet	Btu/Gross Square Feet	\$/Gross Square Feet
1,020,428	163,871	\$1.27

Morty La Roch 10/30/96
Area Facilities Engineer Date

Area Associate Director, OEHE

ENERGY CONSERVATION PROGRAM SUMMARY

IHS AREA ABERDEEN	REPORTED YEAR 1996		
PREPARED BY Najam Ikramullah	TITLE Mechanical Engineer		
PHONE NUMBER 605/226-7461	DATE SUBMITTED <u>10-22-96</u>		
DIRECT AGENCY EXPENDITURES Direct expenditures on facility energy efficiency im Current Fiscal Year Annual Expenditures (Thous.\$) \$250,000 Annual savings and anticipated from expenditures 2	Next Fiscal Ye		
1			
ENERGY SAVINGS PERFORMANCE CONTRA Number of ESP contracts awarded Annual savings anticipated from ESP contracts		(Thous.\$)	
UTILITY INCENTIVES Incentives received(Thous.\$) Funds spent in order to receive incentives Annual savings anticipated from DSM activities	(Thous.\$) MMBTU	(Thous.\$)	
TRAINING Current year expenditures for energy management to Number of personnel trained	training(T	hous.\$)	
Marty LaRoche 10/31/96	A Cal	(0/31/4)	
Area Facilities Engineer Date	Area Associate Director, OEI	HE Date	